BROCK UNIVERSITY MAP LIBRARY

GEOG/ERSC 2P11
Introduction to NTS maps

Intro to assignment: you are given a 1km square piece of land to investigate and create an inventory of land based information from a variety of sources.

Topographic map 30M/3&6 Niagara: is one of 13,000 maps of Canada that represent Canada's land features. Federal mapping program and every country in the world has one, mainly for military purposes, but also are used for many other purposes as well.

Definition:
Accurate representation of the earth's surface showing water features, transportation; cultural information; land use; vegetation; etc.

Contours – brown lines showing elevation; elevation along a single brown line represents the same value. What is the elevation interval?

Legend on the back with abbreviations and a glossary. Colours are standard: blue = water; pink = residential; green = veg; red = roads, etc.

Scale: 1:50,000 – is represented as a ratio of the distance on the map to the distance on the ground. It means one unit on the map represents 50,000 of those same units on the earth's surface.
1 cm = 50,000 cm (half km) 100,000 cm = 1 km; 2 cm = 1 km on the map.
Graphical scale

Grids:

Notice the blue grid on the map in Lake Ontario. This is the Universal Transverse Mercator grid (UTM). Grids are used to locate features on the map precisely.

- **Eastings**: Notice the blue numbers along the bottom margin of the map and notice they increase as we move to the right (east). These represent the easting when we are referring to a grid reference. 47
- **Northings**: The numbers along the vertical axis represent the northing and increase upwards to the north: 70
- Find the intersection of these two lines. Where does it take us? The intersection represents the southwest corner of the grid. 47 70

Locate the red symbol within this grid. What is it? (electrical facility)

Location within 100 m:
Six-digit utm reference for the electrical facility: E474 N705

What is the utm reference for the Lighthouse in Port Dalhousie? E411 N857
What is the elevation at E378 N684? 250 m

1:25,000 NTS 30M/3b Allanburg
Scale is larger.
Find 470 700
Observations? Shows more detail; older map

Describe the topography and general activity in grid 470 700. Memorize the features in your square so you can identify the area immediately on another map. Such as the road network; a dump; shape of a feature.
What municipality is it in? (Thorold)
How can we determine if we have an official plan of Thorold in our collection?

Locating a 1:25K: Index is on the back wall or inside cabinet #2. All 1:25K maps are in cab. #2

Latitude and Longitude:
USE a 1:25,000 scale map to accurately determine lat and long.
Shown by the black lines and numbers in the margin.

- Degrees and minutes of lat and long are shown at each corner of the map.
- Minutes are shown by the alternating white and black bars along the bottom and side of the map in intervals of 30".

You will need lat and long to locate your grid square on maps that do not show the utm grid.

OBM maps 6N:
1:10,000 scale maps show greater detail.
Use the index to determine which sheet your area is located.
Locate OBM in cabinet #11 (red labels)

1:2,000 scale map:
The entire map represents a single grid square.

Map Library Lab Assignment
Lab assignment must be completed before leaving.
On the reverse is a detailed procedure of locating your grid square.

DISPLAY
On the back wall is a display of the procedure for locating your grid square.
There is also a 2P11 Subject guide of required items and other sources.

OTHER MAP SOURCES – Refer to SUBJECT GUIDE and map reading notes